

## **REMARKS / DISCUSSION OF ISSUES**

The present amendment is submitted in response to the Non-Final Office Action mailed February 18, 2009. In view of the amendments above and the remarks to follow, reconsideration and allowance of this application are respectfully requested.

### ***Status of Claims***

Claims 1-28 are pending in the application. Claims 1 and 8 were amended. Claim 28 was added.

### ***Interview Summary***

Applicants appreciate the courtesy granted to Applicant's attorney, Michael A. Scaturro (Reg. No. 51,356), during a telephonic interview conducted on Wednesday, May 13, 2009. During the telephonic interview, Claim 1 was discussed with particular reference to a proposed amendment to claim 1. The Examiner agreed that the proposed amendment would distinguish the claimed invention from the Prins reference. The Examiner will issue an interview summary stating the same.

### ***Allowable Subject Matter***

Applicant wishes to thank the Examiner for indicating that Claims 21, 24, 25 and 27 are allowed and for indicating that Claims 22 and 23 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 112, 2<sup>nd</sup> paragraph as set forth in the instant Office Action. Applicant also wishes to thank the Examiner for indicating that Claims 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten

in independent form including all of the limitations of the base claim and any intervening claims. Applicants have elected to rewrite dependent Claim 12 in independent form including all of the limitations of independent Claim 1 (see new Claim 28). Hence, it is believed that Claim 28 is in condition for allowance.

***Provisional Double Patenting***

Claims 1, 2, 4-18 and 21-26 stand rejected under the doctrine of provisional obviousness-type double patenting over claims 1-23 of copending U.S. Patent Application No. 10/599332 (hereinafter '332). The Office asserts that despite difference in language regarding the "at least one electrode" as in the current application claims, copending application claims provide additional limitations for an obvious variant having at least one, in the instant case two pairs of electrodes.

Claims 3 and 19-20 stand rejected under the doctrine of provisional obviousness-type double patenting over claim 2 of copending U.S. Patent Application No. 10/599332 (hereinafter '332). The Office asserts that Claim 3 is an obvious variant of an electrode shape and hence not patentably distinct.

In response to the rejections of Claims 1, 2, 4-18 and 21-26 and Claims 3, 19-20, a terminal disclaimer is being submitted herewith to overcome this rejection. The current application along with U.S. Patent Application No. 10/599,332 have been previously commonly assigned to Koninklijke Philips Electronics N.V.

***Drawing Objection***

In the Office Action, the drawings were objected to because they include reference character 48, not mentioned in the description. Applicants respectfully submit that reference character 48 is mislabeled and should be reference character 44. Applicants have changed reference character 48 to reference character 44 in Figs 1a and 1b. Support can be found in the specification, for example, at pages 11-12, which recites in part, In the lens system of Figs. 1a and 1b one or both of the inner lens surfaces 12 and 14 and/or one or both of the outer lens surfaces 44 and 46 may be aspherical.

***Rejections under 35 U.S.C. §112***

In the Office Action, Claim 8 stands rejected under 35 U.S.C. §112, second paragraph, for having insufficient antecedence basis for the claim limitation “the liquid-less” portion of the chamber. Claim 8 has been amended in a manner which is believed to overcome the rejections. Specifically, the claim limitation “the liquid-less” portion of the chamber has been amended to recite “the liquid-free” portion of the chamber. In accordance with an embodiment of the invention, the specification teaches a second medium contained within the chamber where the second medium may be a gas having in general a considerable lower refractive index than the liquid which also occupies the same chamber. The specification states that in principle the space in the chamber that is not occupied by the polar liquid may also be at vacuum. The specification goes on to recite that in practice this space will be filled with vapour of the polar liquid, which vapour has a refractive index close to 1. For example, if the polar liquid is water with a tungsten salt dissolved in it, its refractive index may be larger than 1,5. The difference between the refractive index of this polar liquid and that of its vapour thus may be larger than 0,5, which is considerably larger than the difference that can be

achieved with the liquids in known electrowetting lenses.

In the Office Action, Claim 16 stands rejected under 35 U.S.C. §112, second paragraph, for having insufficient antecedence basis for the claim limitation “the optical relevant material of the chamber”. Claim 16 recites, “A switchable optical unit as claimed in claim 1, wherein the index of refraction of the electrically conductive liquid (18; 118; 218) is equal to that of the optically relevant material of the chamber wall (12, 14; 112, 114).” In the Office Action the Examiner states that it is not clear how the index of refraction is different, as provided in dependency of claim 1 and at the same time being equal. Applicants have amended claim 1 in a manner that is believed to remove the contradictory language. Applicants further note that the specification teaches that the optically relevant material is the lens material, in case the chamber is included in a lens system, or the material wherein a phase structure is configured.

***Rejections under 35 U.S.C. §102(b)***

In the Office Action, Claims 1-8, 15 and 19-20 stand rejected under 35 U.S.C. §102(b) as being anticipated by W002/099527 (“Prins”). Applicant respectfully traverses the rejections.

**Claims 1-8, 15 and 19-20 are allowable**

The cited portions of Prins do not anticipate claim 1 because the cited portions of Prins do not teach every element of claim 1. For example, the cited portions of Prins do not disclose or suggest, “*wherein the optically active portion comprises a region through which the beam of radiation passes through the switchable optical unit, which unit comprises a*

*chamber (10; 110; 410; 1410) and an electrically conductive liquid (18; 118; 218; 418; 1418) contained in the chamber*”, as recited in claim 1. Instead, Prins teaches that, in a first case, an incident light ray 14 either undergoes total reflection on the surface 12, and in a second case, the incident light ray 14 is absorbed entirely on the surfaces 12 and 12'. It is noted that in both the first and second case the light ray 14 (i.e., beam of radiation) **does not pass through the optical unit**. Further, the cited portions of Prins do not disclose or suggest, *“wherein in a first mode, the electrically conductive liquid fills the chamber inside the optically active portion, and wherein in a second mode, the electrically conductive liquid fills the chamber outside of the optically active portion”*, as recited in claim 1. Prins does not disclose an optically active portion and an optically inactive portion. Instead, Prins illustrates in Figs. 1a, 1b a, 3a and 3b, a fluid 4 whose position changes between a location near a lower electrode 6 to a location near an upper electrode 5 dependent upon an applied voltage or lack thereof. It is respectfully submitted that the change of position of the fluid 4, as described in Prins does not describe optically active and inactive regions and is therefore different than an electrically conductive liquid filling a chamber inside an optically active portion in a first mode and an electrically conductive liquid that fills a chamber outside of the optically active portion, in a second mode. Hence claim 1 is allowable.

Claims 2-8, 15 and 19-20 depend from claim 1, and are therefore allowable at least by virtue of their dependence from allowable claim 1.

***Rejections under 35 U.S.C. §103(a)***

**I. Claims 9-11 are allowable**

The Office rejects Claims 9-11 as being unpatentable over Prins in view of W002/099527 (“Fenstra”). Applicants respectfully traverse the rejections.

As explained above, the cited portions of Prins do not disclose each and every element of claim 1, from which claims 9-11 depend. Fenstra does not disclose each of the elements of claim 1, from which claims 9-11 depend. For example, Fenstra does not disclose or suggest “*wherein in a first mode, the electrically conductive liquid fills the chamber inside the optically active portion, and wherein in a second mode, the electrically conductive liquid fills the chamber outside of the optically active portion*”, as recited in claim 1. Rather, Fenstra discloses a switchable optical unit having a refractive lens surface on the walls of the chambers and particularly an aspherical surface. The Office Action refers Applicants to Fig. 4 of Fenstra for teaching this feature. However, Fenstra does not disclose or suggest “*wherein in a first mode, the electrically conductive liquid fills the chamber inside the optically active portion, and wherein in a second mode, the electrically conductive liquid fills the chamber outside of the optically active portion*”, as recited in claim 1. Therefore, claim 1 is allowable over the asserted combination of Prins and Fenstra, and claims 9-11 are allowable, at least by virtue of their dependence from claim 1.

**II. Claims 9-11 are allowable**

The Office rejects Claim 16 as being unpatentable over Prins by W002/099527 (“Fenstra”). Applicants respectfully traverse the rejection.

As explained above, the cited portions of Prins and Fenstra, alone and in any

reasonable combination, do not disclose each and every element of claim 1, from which claims 16 depends. Therefore, claim 1 is allowable over the asserted combination of Prins and Fenstra, and claim 16 is allowable, at least by virtue of its dependence from claim 1.

### **III. Claims 17 and 18 are allowable**

The Office rejects Claim 17 and 18 as being unpatentable over Prins by W002/099527 (“Fenstra”) in view of U.S. Patent Publication No. 2002/0176148. Applicants respectfully traverse the rejections.

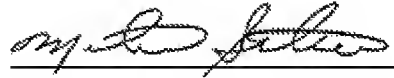
As explained above, the cited portions of Prins and Fenstra, alone and in any reasonable combination, do not disclose each and every element of claim 1, from which claims 17 and 18 depend. Onuki does not disclose each of the elements of claim 1, from which claims 17 and 18 depend. For example, Onuki does not disclose or suggest “*wherein in a first mode, the electrically conductive liquid fills the chamber inside the optically active portion, and wherein in a second mode, the electrically conductive liquid fills the chamber outside of the optically active portion*”, as recited in claim 1. Rather, Onuki discloses a controllable lens system in a camera/hand-held device having a switchable optical unit. However, Onuki does not disclose or suggest “*wherein in a first mode, the electrically conductive liquid fills the chamber inside the optically active portion, and wherein in a second mode, the electrically conductive liquid fills the chamber outside of the optically active portion*”, as recited in claim 1. Therefore, claim 1 is allowable over the asserted combination of Prins, Fenstra and Onuki, and claims 17 and 18 are allowable, at least by virtue of their dependence from claim 1.

### Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-28 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Mike Belk, Esq., Intellectual Property Counsel, Philips Electronics North America, at 914-945-6000.

Respectfully submitted,



Michael A. Scaturro  
Reg. No. 51,356  
Attorney for Applicant

**Mailing Address:**  
Intellectual Property Counsel  
Philips Electronics North America Corp.  
P.O. Box 3001  
345 Scarborough Road  
Briarcliff Manor, New York 10510-8001